

Claims

- [c1] What is claimed is:
- 1.A method for displaying picture images on a display panel, the picture images being formed by frames, the frames comprising:
 - at least one I-frame (inter-frame) which provides a full picture image;
 - at least one P-frame (predict frame) which provides both motion vectors and a partial picture image, the partial picture image provided by the P-frame being substantially different from a full picture image of a directly preceding I or a partial picture image of a directly preceding P-frame, the motion vectors of the P-frame being referenced to the directly preceding I or P-frame; and
 - at least one B-frame (bi-direction predict frame) which provides only motion vectors, the motion vectors of the B-frame being referenced to both a directly preceding I or P-frame and a directly following I or P-frame;
 the method comprising:
 - interpolating at least one frame between two consecutive frames using motion vectors between the two frames so as to increase a frame rate of the picture images.
 - [c2] 2.The method of claim 1 wherein the interpolated frame is generated by dividing the motion vectors stored in the P-frame or the B-frame.
 - [c3] 3.The method of claim 1 wherein the I-frame, P-frame and B-frame are generated by decoding image signals using an MPEG decoder, and the interpolated frame is generated by an up converter.
 - [c4] 4.The method of claim 1 wherein the display panel is a hold-type display panel.
 - [c5] 5.The method of claim 1 wherein the display panel is a PDP (plasma display panel) or an LCD (liquid crystal display) panel.
 - [c6] 6.An MPEG system for displaying picture images on a display panel, the picture images being formed by frames, the frames comprising:
 - at least one I-frame (inter-frame) which provides a full picture image;
 - at least one P-frame (predict frame) which provides both motion vectors and a partial picture image, the partial picture image provided by the P-frame being

substantially different from a full picture image of a directly preceding I or a partial picture image of a directly preceding P-frame, the motion vectors of the P-frame being referenced to the directly preceding I or P-frame; and at least one B-frame (bi-direction predict frame) which provides only motion vectors, the motion vectors of the B-frame being referenced to both a directly preceding I or P-frame and a directly following I or P-frame;

the MPEG system comprising:

an MPEG decoder for decoding image signals so as to generate the frames; and

an up converter for interpolating at least one frame between two consecutive frames using motion vectors between the two frames so as to increase a frame rate of the picture images.

- [c7] 7.The MPEG system of claim 6 wherein the interpolated frame is generated by dividing the motion vectors stored in the P-frame or the B-frame.
- [c8] 8.The MPEG system of claim 6 wherein the display panel is a hold-type display panel.
- [c9] 9.The MPEG system of claim 6 wherein the display panel is a PDP (plasma display panel) or an LCD (liquid crystal display) panel.